REMARKS

In the Office Action mailed May 20, 2003, claims 12-15 stand rejected. Claims 1 through 45 are currently pending in the application. Claims 1-11 and 16-45 were previously withdrawn. The present remarks are intended to supplement the Amendment filed September 15, 2003. Applicants wish to clarify its response regarding U.S. Patent 6,027,930 to Borrecaeck (hereinafter "Borrecaeck"). More specifically, applicant wishes to clarify a potentially ambiguous statement with respect to the third phage in Borrecaeck. Reconsideration is respectfully requested.

35 U.S.C. § 102 Rejections

Claims 12-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Borrecaeck (U.S. Patent 6,027,930) (hereinafter "Borrecaeck"). Applicants respectfully traverse this rejection, as hereinafter set forth.

Borrecaeck is directed to helper phages that can be used in the selection and amplification of phages (SAP technology) or selectively infective phage (SIP) technology. Generally, in SIP the basic infectivity of the phage is destroyed by deleting certain domains from the gene of protein-3. The gene of protein-3 can be divided into N1, N2 and CT domains. The N1 domain is essential for infectivity by the phage and deletion of either the N1 domain or the N1 and N2 domains of protein-3 of the phage abolishes infectivity of the phage. A further characteristic of SIP is that a peptide or protein library is fused N-terminally to the copies of the CT domain or the N2-CT domains of protein-3. No wild-type protein-3 is present on the phage and the phage is not infectious. The infectivity of the phage can only be restored by adding the N1 or N1-N2 complex. These domains are themselves fused or chemically coupled to a ligand that binds to the peptide or protein displayed on the phage. The phages obtained this way contain a functional, protein-3 (*i.e.*, capable of infection).

Borrecaeck discloses three types of phages. A first phage is a protein-3 deleted helper phage that retains the protein-3 promoter and displays the protein-3 on its surface. (Borrecaeck, col. 4, lines 1-10). The surface protein-3 is provided by a plasmid comprising the sequence encoding protein-3 (*Id.* at col. 5, lines 1-10). The helper phages are infectious because they include the surface protein-3. However, the helper phages do not have "at least one copy of a mutant form of a phage coat protein" as recited in claims 12-15 of the presently claimed invention.

A second phage is produced by cells comprising the above helper phages and a phagemid encoding for an anti-hen egg lysozyme Fab fragment, fused with the carboxy-terminal part (CT-part) of the protein-3 (Borrecaeck, col. 5, lines 25-29). This second phage is non-infectious and thus does not anticipate the infectious phage of claim 12 or the phage collection of claims 13-15.

A third phage contains a mutant form of the phage coat protein (a CT/Fab part coupled to a fusion protein containing hen egg lysozyme and a part of the N-terminal part of the protein-3), which "mutant form" retains the ability to "mediate infection of a natural host by the infectious phage". By contrast, the "mutant form" of the phage coat protein of the presently claimed invention has lost the ability to mediate infection of a natural host by the infectious phage. Thus, the third phage does not anticipate phage of claim 12 or the phage collection of claims 13-15.

Borrecaeck fails to anticipate claims 12-15. Reconsideration and withdrawal of the rejection is requested.

CONCLUSION

Claims 12-15 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Office determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact applicants' undersigned attorney.

The applicants again request entry of the amendments as set forth herein and in the Appendices attached hereto.

Respectfully submitted,

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